



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,504	07/03/2003	Paul F. Lewis	027969-0114	4805

23524 7590 01/28/2005

FOLEY & LARDNER  
150 EAST GILMAN STREET  
P.O. BOX 1497  
MADISON, WI 53701-1497

EXAMINER

JOHNSON, JERRY D

ART UNIT	PAPER NUMBER
----------	--------------

1764

DATE MAILED: 01/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

58

<b>Office Action Summary</b>	<b>Application No.</b> 10/613,504	<b>Applicant(s)</b> LEWIS ET AL.	
	<b>Examiner</b> Jerry D. Johnson	<b>Art Unit</b> 1764	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al.

Li et al., U.S. Patent 6,485,794, teach lubricant compositions and their use, for example, to coat beverage containers or conveyor systems for beverage containers (column 1, lines 14-18). A variety of coating compositions can be used. The coating composition typically will include at least one film-forming ingredient that can be cured using thermal cure at least than 200° C. or radiation-induced cure (e.g., UV or visible light cure). Representative film formers are taught in column 3, lines 29+, including, *inter alia*, polyurethanes and resins comprising acrylic monomers, styrenic monomers or a mixture of acrylic and styrenic monomers. The film former usually represents up to about 99 wt. %, more preferably about 50 to about 97 wt. %, and most preferably about 70 to about 95 wt. % of the final coating weight (column 3, line 67 to column 4, line 3). The film former can be used by itself if it provides a sufficiently lubricious surface when cured. Typically, however, the film former will be combined with a liquid, semi-solid or solid lubricant that imparts lubricity to the cured lubricating coating (column 4, lines 4-8). Preferred lubricants include, *inter alia*, fluoropolymers and waxes. A preferred amount of lubricant is at least about 1 wt. %, more preferably about 3 to about 50 wt. %, and most preferably about 5 to about 30 wt. %, based on the weight of lubricant in the final cured coating (column 4, lines 36-42). The lubricant composition can include additional components to provide desired properties (column 5, lines 30-43). The containers can be made of a wide variety of materials including

Art Unit: 1764

glasses, plastics, papers and ceramics (column 5, line 58 to column 6, line 4). While Li et al. differ from the instant claims in not requiring a hydrophobic polymer and at least one wax, it would have been obvious to one having ordinary skill in the art at the time the invention was made to follow the above teachings and arrive at the instantly claimed method, conveyor and container. Additionally, while Li et al. do not disclose the claimed coefficient of friction, it is noted that the coefficient of friction is an inherent property of the lubricant composition. Accordingly, the claimed coefficient would have been obvious because Li et al. teach the lubricant composition.

Claims 1-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al.

Bennett et al., U.S. Patent Application 2002/0051850 A1, teach conveyor and container lubricants which provide a renewable coating that can be reapplied, if desired, to offset the effects of coating wear [0025]. A variety of materials can be employed to prepare the lubricated contains and conveyors including hydrophobic polymers and waxes [0027-0030]. The lubricant compositions preferably have a coefficient of friction that is less than about 0.14, more preferably less than about 0.1 [0033]. The containers can be made of a wide variety of materials including glasses, plastics, metals, papers and ceramics [0036]. The lubricant can be combined with a variety of other function additives for their know uses [0039]. While Bennett et al. differ from the instant claims in not requiring a hydrophobic polymer and at least one wax, it would have been obvious to one having ordinary skill in the art at the time the invention was made to follow the above teachings and arrive at the instantly claimed method, conveyor and container.

Claims 1-5, 10-12, 18-21, 40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 92/19505.

Art Unit: 1764

WO 92/19505 teach coating the exterior surface of a thermoplastic bottle with a protective layer of polyurethane (page 2, lines 12-14). For coating applications, a liquid diluent is usually present with the polyurethane to form a coating composition (page 7, lines 24-25). In addition to a diluent, the coating compositions will usually contain ingredients such as anti-oxidants, ultraviolet light absorbers, flow control agents, slip agents and anti-mar agents (page 8, lines 23-25). Typically, the coating composition is cured at a temperature of from about 20° to 60° C. for about 30 seconds to 4 hours (page 9, lines 23-24). In Examples 1 and 2, polyurethane coating compositions comprising wax are disclosed. While WO 92/19505 differ from the instant claims in not requiring at least one wax, it would have been obvious to one having ordinary skill in the art at the time the invention was made to follow the above teachings and arrive at the instantly claimed method, conveyor and container. Additionally, while WO 92/19505 does not disclose the claimed coefficient of friction, it is noted that the coefficient of friction is an inherent property of the lubricant composition. Accordingly, the claimed coefficient would have been obvious because WO 92/19505 teach the lubricant composition.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 18, 20-26, 41 and 42 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a method of lubricating a container or conveyor with a non-thermally and non-radiatively cured lubricant composition comprising a hydrophobic polymer and at least one wax, said cured lubricant coating having a coefficient of friction of less than 0.15, does not reasonably provide enablement for claiming all methods of lubricating a

Art Unit: 1764

container or conveyor which has a coefficient of friction of less than 0.15. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

It is well established that there must be a reasonable correlation between the scope of the exclusive right granted to a patent applicant and the scope of enablement set forth in the patent application. *In re Fisher*, 427 F.2d, 833, 839, 166 USPQ 18, 24 (CCPA 1970). The specification fails to teach or disclose non-thermally and non-radiatively cured lubricant composition having a coefficient of friction of less than 0.15 which do not contain a hydrophobic polymer and at least one wax. Accordingly, the claims should be limited to the compositions actually taught and disclosed in the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

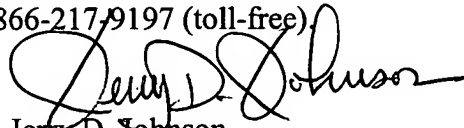
Claims 27-38 and 43-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 27-38 and 43-44 lack antecedent basis to recite "at least one additional hydrophobic polymer."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry D. Johnson whose telephone number is (571) 272-1448. The examiner can normally be reached on 6:00-3:30, M-F, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jerry D. Johnson  
Primary Examiner  
Art Unit 1764

jdj